

Claims:

What is claimed is:

1. A system for loading applications, comprising:
a server for providing a software application, wherein said software application has a number of modules and classes associated therewith;
a control file associated with said software application, wherein said control file specifies a hierarchy of classloaders to be used with said software application; and,
a deployment mechanism that loads with said application a selection of said classloaders according to the hierarchy specified by said control file.
2. The system of claim 1 wherein said control file can be modified by a software developer to specify a particular hierarchy of classloaders to be used with a particular software application.
3. The system of claim 2 wherein said control file is a deployment descriptor.
4. The system of claim 3 wherein said control file is interpreted by an application container constructor during deployment so as to define the application container.
5. The system of claim 4 wherein said interpretation includes traversing the hierarchy and building parent child relationships between the tiers of selected classloaders.
6. The system of claim 1 wherein said hierarchy is specified by a classloader structure declaration.
7. The system of claim 1 wherein a combination of said modules may be associated with a plurality of subordinate classloaders.

8. The system of claim 7 wherein said combination allows a module to be reloaded without reloading other modules.
9. The system of claim 1 wherein the server provides multiple software applications, each with their own hierarchy of classloaders.
10. The system of claim 1 wherein, if a hierarchical classloader is not specified in said control file for a particular application, then a standard non-hierarchical classloader is used.
11. A method for loading software applications on a server, comprising the steps of:
 - providing a software application, wherein said software application has a number of modules and classes associated therewith;
 - parsing a control file associated with said software application, wherein said control file specifies a hierarchy of classloaders to be used with said software application;
 - retrieving a selection of said classloaders according to the hierarchy specified by said control file; and,
 - loading said modules and classes as part of said application according to said hierarchy.
12. The method of claim 11 wherein said control file can be modified by a software developer to specify a particular hierarchy of classloaders to be used with a particular software application.
13. The method of claim 12 wherein said control file is a deployment descriptor.
14. The method of claim 13 wherein said control file is interpreted by an application container constructor during deployment so as to define the application container.

15. The method of claim 14 wherein said interpretation includes traversing the hierarchy and building parent child relationships between the tiers of selected classloaders.
16. The method of claim 11 wherein said hierarchy is specified by a classloader structure declaration.
17. The method of claim 11 wherein a combination of said modules may be associated with a plurality of subordinate classloaders.
18. The method of claim 17 wherein said combination allows a module to be reloaded without reloading other modules.
19. The method of claim 11 wherein the server provides multiple software applications, each with their own hierarchy of classloaders.
20. The method of claim 11 wherein, if a hierarchical classloader is not specified in said control file for a particular application, then a standard non-hierarchical classloader is used.
21. A computer-readable medium including instructions stored thereon which when executed cause the computer to perform the steps of
- providing a software application, wherein said software application has a number of modules and classes associated therewith;
 - parsing a control file associated with said software application, wherein said control file specifies a hierarchy of classloaders to be used with said software application;
 - retrieving a selection of said classloaders according to the hierarchy specified by said control file; and,
 - loading said modules and classes as part of said application according to said hierarchy.

22. The computer readable medium of claim 21 wherein said control file can be modified by a software developer to specify a particular hierarchy of classloaders to be used with a particular software application.
23. The computer readable medium of claim 22 wherein said control file is a deployment descriptor.
24. The computer readable medium of claim 23 wherein said control file is interpreted by an application container constructor during deployment so as to define the application container.
25. The computer readable medium of claim 24 wherein said interpretation includes traversing the hierarchy and building parent child relationships between the tiers of selected classloaders.
26. The computer readable medium of claim 21 wherein said hierarchy is specified by a classloader structure declaration.
27. The computer readable medium of claim 21 wherein a combination of said modules may be associated with a plurality of subordinate classloaders.
28. The computer readable medium of claim 27 wherein said combination allows a module to be reloaded without reloading other modules.
29. The computer readable medium of claim 21 wherein the server provides multiple software applications, each with their own hierarchy of classloaders.

30. The computer readable medium of claim 21 wherein, if a hierarchical classloader is not specified in said control file for a particular application, then a standard non-hierarchical classloader is used.